

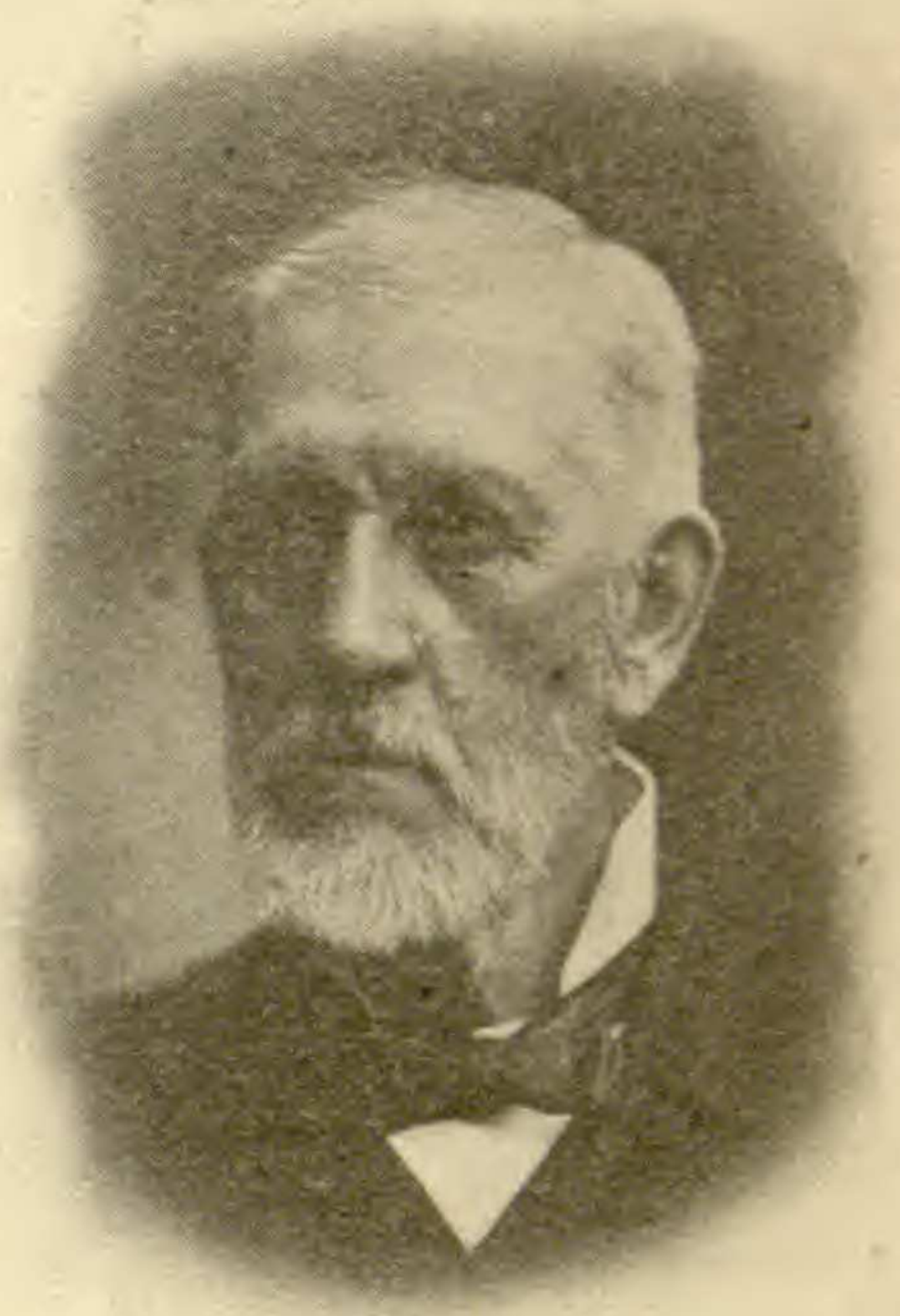
BRIEFER ARTICLES.

DAVID FISHER DAY

(WITH PORTRAIT)

JUDGE DAVID F. DAY, who died on August 21, 1900, was born in Buffalo, N. Y., in 1829, and his whole life was spent in that city. For more than fifty years he was engaged in the practice of the law, in which profession he held high rank.

His love of nature, which was that of an enthusiast, early led him to the study of the natural sciences, in which he became most proficient. As a field botanist he was excelled by few. Gifted with a remarkable memory and a particularly clear conception of the relationships of families and genera, he was able to place a new plant with a facility that I have seldom seen equaled. His methods of reasoning upon botanical problems were not always the methods of the schools, and his way of approaching a question from an unusual standpoint was refreshing and often the means of solving difficulties of long standing. The fact that he was not a professional



botanist seems to have deterred him from publishing many of his observations and deductions, which were of great interest and value.

In connection with Judge Clinton he made a thorough study of the local flora, and the result appeared in "A catalogue of the plants of Buffalo and vicinity," published in 1883. Later he prepared a list of plants growing on the reservation at Niagara Falls, which was published by the state. He was one of the founders of the Buffalo Society

1900]

of Natural Sciences, and a life-long member of it. To him also is due the credit of establishing the Buffalo Botanic Garden, in which he was particularly interested.

His library was a notable one, as he was a collector of rare discrimination, and the works on botany were many and valuable. In addition to the more pretentious volumes, a large collection of pamphlets was accumulated, among which appear a very large number of local catalogues. These books of botanical interest, as well as his collections of living plants and herbarium specimens, he was preparing to transfer to the Botanic Garden when he was stricken down.

Mr. Day had for years been a member of the Park Commission of his city, and drew the act which created the Park department. In this act, drawn thirty years ago, he made provision for both botanical and zoological collections, both of which, after years of waiting, he saw established.

His loss will be mourned by the many botanists of his acquaintance, as well as by his fellow-citizens, by whom he was held in high esteem.—JOHN F. COWELL, *Buffalo Botanic Garden*.

OBSERVATIONS ON THE ROOT SYSTEM OF CERTAIN CACTACEÆ.

THOSE who make botanical trips into arid regions do so generally with the one idea of collecting material to be worked up at leisure in laboratories or herbaria, or to be deposited in botanic gardens. Their stay, as a rule, is closely limited, and the necessity of covering a great amount of ground brings with it a tendency to pass over those details which take considerable time. The root system of desert plants, both as regards structure and distribution of roots, is one of those questions which has perforce been to a great extent neglected, our knowledge, generally speaking, being confined to the examination of the amount of underground growth collected with herbarium specimens. Therefore it seemed to me worth while during my stay in Tucson, Arizona, in the midst of the great cactus plains, to make a rather careful study of the roots of certain large forms which could scarcely be preserved *in toto*.

The root systems of Cactaceæ, in general, are somewhat smaller than would be expected. The distribution, however, is such as in a way to make good the deficiency in size and length. The specific